The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for forming an oriented material, comprising:

depositing an oriented component from an oriented liquid crystal medium onto a substrate.

2. The method of Claim 1, wherein the oriented material comprises a film.

3. The method of Claim 1, wherein the oriented material comprises a uniaxial molecular film.

4. The method of Claim 1, wherein the oriented material comprises a monolayer film.

5. The method of Claim 1, wherein the oriented liquid crystal medium comprises a thermotropic liquid crystal.

6. The method of Claim 1, wherein the oriented liquid crystal medium comprises a liquid crystal chosen from at least one of a nematic liquid crystal or a smectic liquid crystal.

7. The method of Claim 1, wherein the oriented liquid crystal medium is oriented by an external influence.

8. The method of Claim 1, wherein the oriented liquid crystal medium is obtained from an external influence chosen from at least one of a magnetic field, an electric field, an alignment layer on a surface in contact with the liquid crystal, shearing the liquid crystal medium, or causing the liquid crystal to flow.

9. The method of Claim 1, wherein the oriented liquid crystal medium is a solution.

10. The method of Claim 1, wherein the oriented liquid crystal medium is a suspension.

11. The method of Claim 1, wherein the component comprises an organic molecule.

12. The method of Claim 1, wherein the component comprises a particle.

13. A material produced by the process of Claim 1.

14. The material of Claim 13, wherein the material comprises a film.

15. The material of Claim 13, wherein the material comprises a uniaxial particulate film.

16. The material of Claim 13, wherein the material comprises a monolayer film.

17. A method for forming an oriented material having at least two layers, comprising:

depositing a first oriented component from a first oriented liquid crystal medium onto a substrate to provide a first oriented layer; and

depositing a second oriented component from a second oriented liquid crystal medium onto the first oriented layer to provide a second oriented layer adsorbed onto the first layer.

18. The method of Claim 17, wherein the oriented material comprises a film.

19. The method of Claim 17, wherein the oriented liquid crystal medium comprises a thermotropic liquid crystal.

20. The method of Claim 17, wherein the oriented liquid crystal medium is obtained from an external influence chosen from at least one of a magnetic field, an electric field, an alignment layer on a surface in contact with the liquid crystal, shearing the liquid crystal medium, or causing the liquid crystal to flow.

21. The method of Claim 17, wherein the oriented liquid crystal medium is a solution.

22. The method of Claim 17, wherein the oriented liquid crystal medium is a suspension.

23. The method of Claim 17, wherein the component comprises an organic molecule.

24. The method of Claim 17, wherein the component comprises a particle.

25. The method of Claim 17, wherein the first oriented component has an orientation that is the same as the second oriented component.

26. The method of Claim 17, wherein the second oriented component has an orientation that is different from the second oriented component.

27. A method for forming an oriented material having at least two layers, comprising:

depositing an oriented component from an oriented liquid crystal medium onto a substrate to provide an oriented layer; and

depositing a second component from a liquid crystal medium onto the oriented layer to provide a second layer adsorbed onto the oriented layer.

28. The method of Claim 27, wherein the second component is randomly oriented.

29. A method for forming an oriented material having at least two layers, comprising:

depositing a first component from a liquid crystal medium onto a substrate to provide a first layer; and

depositing an oriented component from an oriented liquid crystal medium onto the first layer to provide an oriented layer adsorbed onto the first layer.

30. The method of Claim 32, wherein the first component is randomly oriented.

31. A method for forming a material having a plurality of layers, at least one of the layers being an oriented layer, comprising:

depositing a first component from a first liquid crystal medium onto a substrate to provide a first layer; and

sequentially depositing successive components from successive liquid crystal media to provide successive layers,

wherein each successive layer is adsorbed onto the previously deposited layer, and wherein at least one layer is an oriented layer formed by depositing an oriented component from an oriented liquid crystal medium.

32. The method of Claim 31, wherein at least one component comprises an organic molecule.

33. The method of Claim 31, wherein at least one component comprises a particle.

34. A method for forming an oriented material, comprising

obtaining a liquid crystal medium comprising a liquid crystal solvent and an orientationally orderable component;

contacting the liquid crystal medium with a surface for receiving the orderable component;

applying an influence to the liquid crystal medium to provide an oriented liquid crystal medium, wherein the orderable component is orientationally ordered in the oriented medium; and

depositing the orientationally ordered component onto the surface to provide the oriented material.

35. The method of Claim 34, wherein the component comprises an organic molecule.

36. The method of Claim 31, wherein the component comprises a particle.

37. A material comprising at least one oriented layer, wherein the oriented layer is formed by depositing an oriented component from an oriented liquid crystal medium.

38. The material of Claim 37, wherein the material comprises a film.

39. The material of Claim 37, wherein the material comprises a uniaxial particulate film.

40. The material of Claim 37, wherein at least one component comprises an organic molecule.

41. The material of Claim 37, wherein at least one component comprises a particle.

42. A multilayered material comprising at least one oriented layer, wherein the oriented layer is formed by depositing an oriented component from an oriented liquid crystal medium.

43. The material of Claim 42, wherein at least one component comprises an organic molecule.

44. The material of Claim 42, wherein at least one component comprises a particle.

45. A material produced by the process of Claim 17.

46. A material produced by the process of Claim 27.

47. A material produced by the process of Claim 29.

48. A material produced by the process of Claim 31.

49. A material produced by the process of Claim 34.